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10/672,514	09/25/2003	Thomas Gauweiler	11884/401203	1167
26646	7590	05/08/2007		
KENYON & KENYON LLP ONE BROADWAY NEW YORK, NY 10004			EXAMINER TIMBLIN, ROBERT M	
			ART UNIT	PAPER NUMBER
			2167	
			MAIL DATE	DELIVERY MODE
			05/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/672,514

Applicant(s)

GAUWEILER, THOMAS

Examiner

Robert M. Timblin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 15 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1, 3 and 9-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3, and 9-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

This office action corresponds to application 10/672,514 and Applicants remarks/amendments filed 2/15/2007.

### Response to Amendment

Amendments to claims 1, 9 and 10 have been recorded and acknowledged by the Examiner. Claim 2 has been cancelled and claims 11-15 added. Accordingly, claims 1, 3, and 9-15 are pending in this application.

### Claim Objections

The current amendments have overcome the previous claim objections and therefore those objections are withdrawn.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kodavalla et al. ("Kodavalla" hereinafter) (US Patent 5,717,919) in view of Paul et al. (Paul, hereafter) (U.S. Patent 7,051,080 B1).

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**With respect to claim 1**, Kodavalla discloses A method, comprising:

(a) retrieving a first record from a database in response to a request from a first recordset' as the clients issue a query for retrieving particular data meeting the query condition from table 250 (col. 6, lines 14-24 and figure 2).

(b) saving the first record on a first bufferpage (311) of a memory, the first bufferpage being associated with the first recordset' as storing data records in a data page (col. 7 lines 29-31 and figure 3A).

(c) repeating steps (a) and (b) for at least one further record' as storing one or more records per page; in this case, storing 50 – 100 records (col. 7 lines 31-35 and figure 3A).

(d) when a next record requested by the first recordset is larger than a freespace on the first bufferpage, saving the next record on a second bufferpage (321) of the local memory associated with the mobile device application, the second bufferpage being associated with the first recordset' as when a data page is "full" a new data page is allocated (col. 7, lines 33-35 and figure 3A). Furthermore, if insufficient room exists, the system allocates a new page (col. 7, lines 45-47).

(e) determining if one of the first record, the at least one further record, and the next record was previously retrieved and saved in the local memory associated with the mobile device application by at least one of the first recordset and at least one second recordset as a prior record,

(f) storing a pointer with the prior record, the pointer pointing to the one of the first record, the at least one further record, and the next record if one of the first record, the at least one further record, and the next record was previously retrieved and saved as the prior record,

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otherwise creating a b.o. kernel pointing to one of the first record, the at least one further record and the next record as every page is linked together with forward and backward page pointers to form a "page chain" (drawing reference 300 col. 7 lines 34-41 and figures 3A-B).

Kodavalla, however, does not explicitly teach a mobile device application and local memory associated with the mobile device application.

Paul, however, teaches a mobile device application (mobile device 101, application 116 and figures 1A, 1C and abstract). Paul also teaches a local memory associated with the mobile device application (drawing reference 110 of figure 1A, figures 1C-D, abstract, col. 1 line 35-40, and col. 6 lines 26-67) for managing information at a mobile application server.

In the same field of endeavor, (i.e. data processing in a client/server environment), it would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because Paul's teachings would have given Kodavalla's system a way to manage information in a mobile device having limited memory (Paul at column 4 lines 19-20). Paul's system would further enable Kodavalla's system to efficiently present information to a client.

**With respect to claim 3**, Kodavalla discloses comparing the freespace on the first bufferpage to a size of the next record as maintaining a free list containing a list of free spaces with sufficient room for storing at he particular record being inserted (col. 2, lines 32-35). Furthermore a comparison is taught by determining if a page is full (col. 7, lines 29-35).

**With respect to claim 9**, Kodavalla discloses A system for managing bufferpages and redundant copies of records of a mobile device application, comprising:

a remote database memory (drawing reference 240);

(a) retrieve a first record from the remote database memory in response to a request from a first recordset as the clients issue a query for retrieving particular data meeting the query condition from table 250 (col. 6, lines 14-24 and figure 2);

(b) save the first record on a first bufferpage of the program memory, the first bufferpage being associated with the first recordset as storing data records in a data page (col. 7 lines 29-31 and figure 3A);

(c) repeat (a) and (b) for at least one further record as storing one or more records per page; in this case, storing 50 – 100 records (col. 7 lines 31-35 and figure 3A);

(d) when a next record requested by the first recordset is larger than a freespace on the first bufferpage, save the next record on a second bufferpage of the local program memory associated with the mobile device application, the second bufferpage being associated with the first recordset as when a data page is “full” a new data page is allocated (col. 7, lines 33-35 and figure 3A). Furthermore, if insufficient room exists, the system allocates a new page (col. 7, lines 45-47); and

(e) determine if one of the first record, the at least one further record, and the next record was previously retrieved and saved on the local program memory associated with the mobile device application by at least one of the first recordset and at least one second recordset as a prior record, and

(f) store a pointer with the prior record, the pointer pointing to the one of the first record, the at least one further record, and the next record if one of the first record; the at least one further record, and the next record was previously retrieved and saved as the prior record, otherwise creating a b.o. kernel pointing to one of the first record, the at least one further record and the next record (drawing reference 300, col. 7 lines 34-41 and figures 3A-B).

Kodavalla fails to expressly teach a local program memory associated with the mobile device application and a local mobile processor coupled to the remote database memory and the local program memory associated with the mobile device application.

Paul, however, teaches a local program memory associated with the mobile device application (client 101 and drawing references 110 and 116 of figure 1A and 170 of figure 1C);

and a local mobile processor (drawing reference 110) coupled to the remote database memory (figure 1A) and the local program memory associated with the mobile device application (drawing references 110 and 116), the local mobile processor (drawing reference 110) for interacting with a mobile client (Paul, abstract).

In the same field of endeavor, (i.e. data processing in a client/server environment), it would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because Paul's teachings would have given Kodavalla's system a way to manage information in a mobile device having limited memory (Paul at column 4 lines 19-20). Paul's system would further enable Kodavalla's system to efficiently present information to a client.



**With respect to claim 10**, Kodavalla teaches A method of managing fixed units of buffer memory associated with a mobile client application, comprising:

retrieving a record stored in a remote database memory as the clients issue a query for retrieving particular data meeting the query condition from table 250 (col. 6, lines 14-24 and figure 2).;

determining a size of the retrieved record and a size of a freespace of a current fixed unit of buffer memory (col. 7 lines 43-50) and

saving the retrieved record in the current fixed unit of buffer memory if the size of the retrieved record is smaller than the free space of the current fixed unit of buffer memory (col. 7 lines 43-45);

saving the retrieved record in a next fixed unit of buffer memory if the size of the retrieved record is larger than the freespace of the current fixed unit of buffer memory (col. 7 lines 30-40; adding a new page when full);

determining if the retrieved record was previously retrieved and stored by the mobile client application as (drawing reference 300, col. 7 lines 34-41, figures 3A-B and also a system catalog that maintains Page IDs) and:

storing a pointer pointing from a fixed unit of buffer memory storing a most recent copy of the retrieved record to a fixed unit of buffer memory storing a new copy of the retrieved record, if the retrieved record was previously retrieved and stored (figures 3A and 3B and at least drawing references 310, 311, and 321);

creating a b.o.kernel including a key pointing to the fixed unit of buffer memory storing the new copy of the retrieved record, if the retrieved record was not previously retrieved and stored (figures 1B, 3A-B and column 4 lines 50-60, col. 8 line 39-56 ).

Kodavalla fails to teach a mobile client application of claim 10.

Paul, however, teaches a mobile client application (drawing reference 116 of figure 1A and 170 of figure 1C) for interacting with mobile clients (Paul, abstract).

In the same field of endeavor, (i.e. data processing in a client/server environment), it would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references because Paul's teachings would have given Kodavalla's system a way to manage information in a mobile device having limited memory (Paul at column 4 lines 19-20). Paul's system would further enable Kodavalla's system to efficiently present information to a client.

**With respect to claim 11**, Kodavalla teaches wherein determining further comprises checking a look-up table (col. 3 line 49-50, col. 7 line 43-45 and col. 10, line 5-15).

**With respect to claim 12**, Kodavalla teaches the system of claim 9, wherein the local mobile processor is adapted to determine if one of the first record, the at least one further record, and the next record was previously retrieved and saved as the prior record by checking a look-up table (col. 3 line 49-50, col. 7 line 43-45 and col. 10, line 5-15).

**With respect to claim 13**, Kodavalla teaches the method of claim 10, wherein determining if the retrieved record was previously retrieved and stored by the mobile client application comprises checking a look-up table (col. 3 line 49-50, col. 7 line 43-45 and col. 10, line 5-15).

**With respect to claim 14**, Kodavalla teaches the method of claim 10, further comprising storing the b.o. kernel in a look-up table (col. 3 line 49-50, col. 7 line 43-45 and col. 10, line 5-15).

**With respect to claim 15**, Kodavalla teaches the method of claim 10, wherein the key comprises a counter indicating a number of times the retrieved record is stored (col. 56, 12-13 lines below SL\_CHGVALUE).

### **Response to Arguments**

Applicant's arguments filed 2/15/2007 have been fully considered but they are not persuasive.

Applicant argues in the response on pages 8-9 that Kodavalla along with Paul fail to teach the limitations of:

(1) "determining if one of the first record, the at least one further record, and the next record was previously retrieved and saved...as a prior record"

(2) “storing a pointer with the prior record...pointing to the one of the first record, the at least one further record, and the next record if one of the first record, the at least one further record, and the next record was previously retrieved and saved as the prior record ”

(3) creating a b.o. kernel pointing to one of the first record, the at least one further record, and the next record.

The Examiner respectfully disagrees given the following:

As seen in figures 3A-B and a description found on columns 7-8, Kodavalla teaches forming a page chain in which each page in the chain is a storage unit containing one or more records (col. 7 line 29-41). Kodavalla goes on to teach that records are appended, or added, to the end (col. 7 line 43-44) in an append-only fashion (col. 8 line 59-62). Should a page become “full” a new page is added so records can be inserted.

Kodavalla teaches argued limitation (1) because in forming a data page chain, the last page is determined and tracked (Kodavalla, col. 10 line 9). For example, before allocating a new data page, the last page is determined (see fig. 3a, *last page*) so that another can be added to make more room for an insert (col. 8 line 59-62). This last page includes at least the claimed first record, at least one further record, and the next record because appending records in an appending fashion suggests the timing of when a record was appended (i.e. a record is inserted, another record that is appended would be a further record and another record appended would be the next record in a data page). As this last page contains the first record, at least one further record, and the next record, they are implied as being determined as a prior record because they were previously retrieved prior to appending more records.

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Accordingly, Kodavalla teaches limitation (2) as seen in figures 3A-B as the forward and backward pointers 311 and 321. As these pointers are seen to be stored on the data pages also containing the records, it can also be seen that a pointer is stored *with* the records (i.e. the prior record, the at least one further record, and the next record as taught in the above paragraph). Therefore Applicant's limitation (2) is taught or suggested by Kodavalla.

Lastly, Kodavalla teaches limitation (3) starting in the description of the software (col. 4 line 55) where a kernel is included. Kodavalla then teaches, in figures 3A-3B and column 20 line 55, allocating a first page. As understood, Applicant's b.o. kernel points to a first record (i.e. a record with no prior record). Since Kodavalla teaches the use of a kernel, it is inherent that a kernel would be present (and thus would have been created) to allocate and point to the first page containing at least a first record, at least one further record and the next record. Further, as Kodavalla's invention can be used in a business environment (i.e. col. 8 line 62-63) the b.o. kernel is sufficiently taught.

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**Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert M. Timblin whose telephone number is 571-272-5627. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Cottingham can be reached on 571-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Robert M. Timblin

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Patent Examiner AU 2167

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